



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBT18601
Job Sheet 166452



Part No: RBT18601

Job Qty: 1 pcs

Part Name: Main Rotor Swashplate ReGreasing Tool



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/10/17

Job Tracking No:

Due Date: 10/20/17

Created By: Marie Lajeunesse

Type: Stock

Description:

Customer: Seaside Helicopters Inc (CSEAS01)

2580 Jason Court Oceanside, CA, 92056 USA ph:(760) 806-3780

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		10/20/17	0.00	0.00	Start up container		<i>DL</i>
110	Waterjet	1 pcs		10/20/17	0.00	0.00	Waterjet1		<i>DL</i>
120	QC	1 pcs		10/20/17	0.00	0.00	QC2		<i>DL</i>
130	CNC Vertical Machining	1 pcs		10/20/17	0.00	0.00	MORI NV5000 #1		<i>DL</i>
140	QC	1 pcs		10/20/17	0.00	0.00	QC2		<i>DL</i>
150	QC	1 pcs		10/20/17	0.00	0.00	QC8		
160	QC	1 pcs		10/20/17	0.00	0.00	QC5		
170	Outsource	1 pcs		10/20/17	0.00	0.00	Outsource4		
180	Packaging	1 pcs		10/20/17	0.00	0.00	Packaging2		
190	QC	1 pcs		10/20/17	0.00	0.00	QC6		
200	Small Fab	1 pcs		10/20/17	0.00	0.00	Small Fab		
210	QC	1 pcs		10/20/17	0.00	0.00	QC5		
220	Packaging	1 pcs		10/20/17	0.00	0.00	Packaging3		
230	QC	1 pcs		10/20/17	0.00	0.00	QC21		

Part Op 110 - 1-Cut as per Dwg ***CUT QTY2 PER ASSEMBLY*** Dwg Rev: _____ Prog Rev: _____ (Red Barn folder)

Descriptions: 2-Deburr if necessary

130 - Machine as per DWG. Folio _____ DEBURR

170 - -Issue P/O to ATG : PO _____ -ANODIZE COLOR RED, PER IAW MIL-A-8625 TYPE-2 CLASS-2 Water seal -Certificate of Conformity is required

200 - Assemble as per DWG.

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M6061T6B0.500X05.000	1	24	0	0

Part Specifications

Specifications could not be found.



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Job Created: 10/10/17

Job Tracking No:

Due Date: 10/20/17

Created By: Marie Lajeunesse

Type: Stock

Description:

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Due Date	Standard		Workcenter/Supplier	
				Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time
90	Start up Operation	1 Ea	10/20/17	0.00	0.00	Start up container	DL
110	Waterjet	1 pcs	10/20/17	0.00	0.00	Waterjet1	DL
120	QC	1 pcs	10/20/17	0.00	0.00	QC2	DL
130	CNC Vertical Machining	1 pcs	10/20/17	0.00	0.00	Mill Conv 1	
140	QC	1 pcs	10/20/17	0.00	0.00	QC2	
150	QC	1 pcs	10/20/17	0.00	0.00	QC8	
160	QC	1 pcs	10/20/17	0.00	0.00	QC5	
170	Outsource	1 pcs	10/20/17	0.00	0.00	Outsource4	
180	Packaging	1 pcs	10/20/17	0.00	0.00	Packaging2	
190	QC	1 pcs	10/20/17	0.00	0.00	QC6	
200	Small Fab	1 pcs	10/20/17	0.00	0.00	Small Fab	
210	QC	1 pcs	10/20/17	0.00	0.00	QC5	
220	Packaging	1 pcs	10/20/17	0.00	0.00	Packaging3	
230	QC	1 pcs	10/20/17	0.00	0.00	QC21	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M6061T6B0.500X7-000	0	0	0	0

Part Specifications

Specifications could not be found.

Plex 10/10/17 8:35 AM Dart.lajeunesse.marie



DQA: _____ Date: _____
QA Closed: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

DISPOSITION		AGAINST DEPARTMENT/PROCESS																																													
Work Order: _____	Re-work ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	Skid-tube ☐ Machining ☐ Thermofit ☐ Lat ☐ QT ☐	Engineering ☐ Quality ☐ Other ☐ Water ☐																																												
Part No. _____																																															
NCR No. _____																																															
Date: _____	Step #: _____																																														
Description Work Order Deviation																																															
Root Cause <table border="1"><tr><td>Environment</td><td>No Re-verification</td></tr><tr><td>Design</td><td>Operator</td></tr><tr><td>Doc/Data</td><td>Offset/Setup</td></tr><tr><td>Equip/Tooling</td><td>Supplier</td></tr><tr><td>Handling/Pre</td><td>Training</td></tr><tr><td>Material</td><td>Use for Testing</td></tr><tr><td>Internal Transport</td><td>Poor Information</td></tr><tr><td>Tribal Knowledge</td><td>Rushing</td></tr><tr><td>LOA</td><td>Product Improvement</td></tr><tr><td>Substation</td><td>Process Improvement</td></tr><tr><td>Past Expiry Date</td><td>Manufacturing Process</td></tr><tr><td>Misidentified</td><td>Past Due</td></tr></table> <table border="1"><tr><td>Pressure/Forced</td><td>Temperature/Cur</td></tr><tr><td>Bending</td><td>Set-up</td></tr><tr><td>Centre Not Concentric</td><td>BOM/Route</td></tr><tr><td>Cracks</td><td>Broken/Damage/L</td></tr><tr><td>Crimp/Kink/Ripple/Wave</td><td>Inspection Incomp</td></tr><tr><td>Cuffs</td><td>Contamination</td></tr><tr><td>Crushing</td><td>Countersink</td></tr><tr><td>Heat Treat</td><td>Cut Too Short</td></tr><tr><td>Wave/Twist in Tube</td><td>Instructions Incomp</td></tr><tr><td>Marks/Chatter</td><td>Drill Holes</td></tr></table> OTHER : ☐				Environment	No Re-verification	Design	Operator	Doc/Data	Offset/Setup	Equip/Tooling	Supplier	Handling/Pre	Training	Material	Use for Testing	Internal Transport	Poor Information	Tribal Knowledge	Rushing	LOA	Product Improvement	Substation	Process Improvement	Past Expiry Date	Manufacturing Process	Misidentified	Past Due	Pressure/Forced	Temperature/Cur	Bending	Set-up	Centre Not Concentric	BOM/Route	Cracks	Broken/Damage/L	Crimp/Kink/Ripple/Wave	Inspection Incomp	Cuffs	Contamination	Crushing	Countersink	Heat Treat	Cut Too Short	Wave/Twist in Tube	Instructions Incomp	Marks/Chatter	Drill Holes
Environment	No Re-verification																																														
Design	Operator																																														
Doc/Data	Offset/Setup																																														
Equip/Tooling	Supplier																																														
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Tribal Knowledge	Rushing																																														
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Wave/Twist in Tube	Instructions Incomp																																														
Marks/Chatter	Drill Holes																																														

S007851

Main Rotor Swashplate ReGreasing Tool

PART NO:
Revision:
Operation:
Change No:

RBT18601
Start up Operation

Mfg Date: 11/08/17
Job No: 166452

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

166452

Page 1

Approvals: Process Plan: DAS 21 Date: SEP 27 2017 Tooling: _____ Date: _____ Run Start *NR1*
 QC: 9-89 Date: SEP 27 2017 SPC (Y/N): _____ Date: _____ Stop *NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Work Order ID 166452

Friday, September 22, 2017 12:56:20 PM

166452

Page 3

Item ID: RBT18601 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Main Rotor Swashplate ReGreasing Tool
Start Date: 9/22/2017 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 10/26/2017 Req'd Qty: 1.00 *1* Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo Engrave part number and/or batch number And/or T/N number as required Using Marktronic engraver as per DWG.	0.00 0.00							
170 *170* Outsource4 Outsource process - Anodize	Memo -Issue P/O to ATG : PO _____ -ANODIZE COLOR RED, PER IAW MIL-A-8625 TYPE-2 CLASS-2 -Certificate of Conformity is required	0.00 0.00							
180 *180* Packaging Packaging	Receive & Inspect for Damage & Mat'l Certs Memo	0.00 0.00							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 166452

Friday, September 22, 2017 12:56:20 PM

166452

Page 4

Item ID: RBT18601 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Main Rotor Swashplate ReGreasing Tool
Start Date: 9/22/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 10/26/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC6- All purchased or subcontracted products Memo	0.00 0.00				_____	_____	_____	_____
200 *200* Small Fab Small Fab	Small Fab Memo Assemble as per DWG.	0.00 0.00				_____	_____	_____	_____
210 *210* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				_____	_____	_____	_____

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

166452

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N900040100

Setup Start *NS1*

Stop ***NS2***

Start Date: 9/22/2017 **Start Qty:** 1.00 ***1***

Required Date: 10/26/2017 **Req'd Qty:** 1.00 *** 1 ***

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

220 Identify as per dwg & Stock Location: _____

0.00

220

Packaging	Memo	0.00				
-----------	------	------	--	--	--	--

Packaging

230	QC21- Final Inspection - Work Order Release	0.00
-----	---	------

230

QC	Memo	0.00
----	------	------

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Misabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER :					
Misidentified ☐	☐ Past Due						

Friday, September 22, 2017 12:56:24 PM

Work Order ID: 166452

Parent Item: RBT18601

RRT18601

Parent Item Name: Main Rotor Swashplate ReGreasing Tool

Start Date: 9/22/2017

Required Date: 10/26/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev.A 17.09.22 New issue DP Verify DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.500X7.000		Purchased	No			110	f	0.0000	0.34	0.357895			
M6061T6B0 500X7 000									**				
6061T6 BAR 0.500 X 7.000													

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

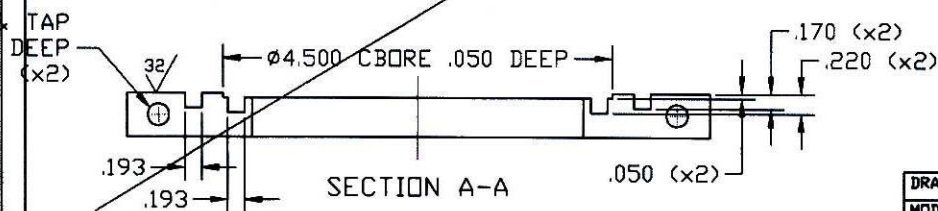
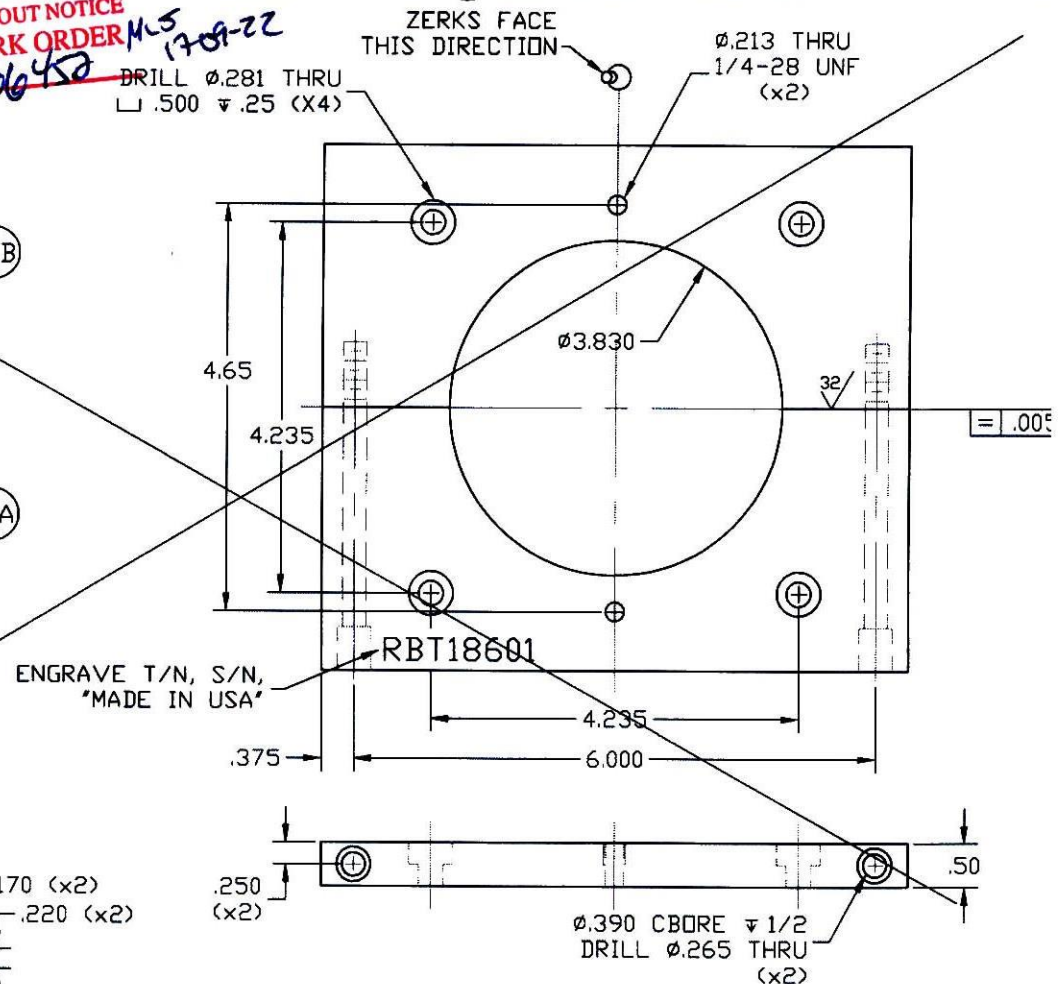
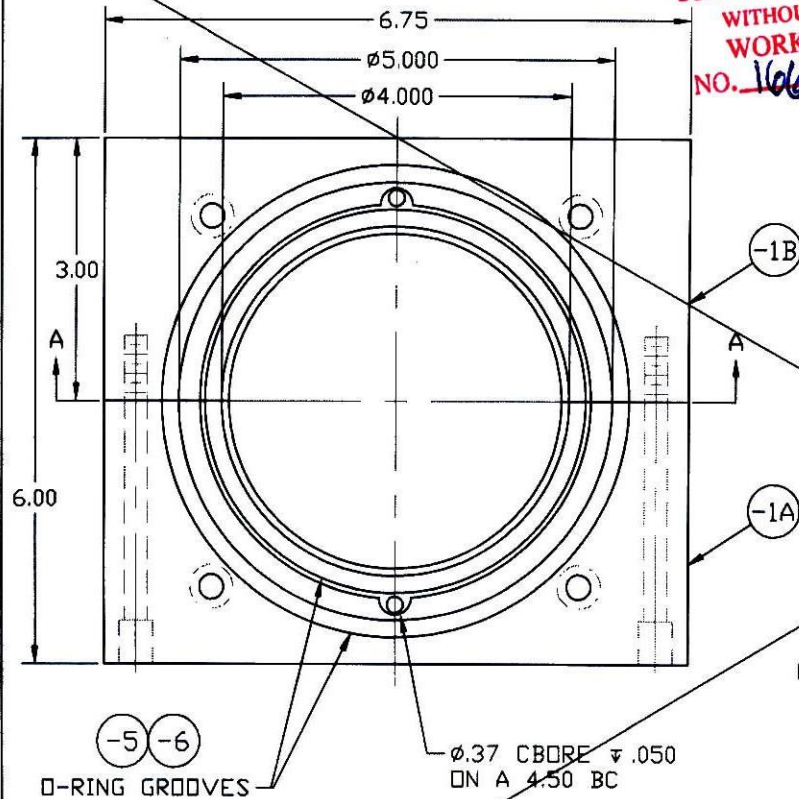
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

WITHOUT NOTICE
WORK ORDER NO. 166450 DRILL Ø.281
MCS 1709-22
1.500 = 25

REVISIONS			
REV	DESCRIPTION	DATE	APPROVE
	(-3)		



PART #	QTY	DESCRIPTION
-1	2	6061 3 x 6 3/4
-3	2	ZERK - 1/4-28 NF x 45"
-5	1	O-RING - 2-345N70 345 - BUNAN
-6	1	O-RING - 2-345N70 353 - BUNAN
-8	2	SOCKET HEAD CAP SCREW - 1/4-20 x 3 1/4

USED ON MODEL
MD-500

DRAWN BY:		CHRIS PARR	
MODIFIED BY:		COLE	
HEAT TREAT	FINISH		
SPEC	ANODIZE RED		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
TOLERANCES ON:		ANGLES	
DECIMALS			
.xxx $\pm$.010			
xx $\pm$.03		$\pm$.5°	
x $\pm$			
UNLESS OTHERWISE SPECIFIED			
1. BREAK ALL SHARP EDGES			
.015 x .45° PR .015 R			
2. DIMENSIONAL LIMITS APPLY AFTER PLATING			

RED BARN MACHINE

TITLE
SWASH PLATE REGREASING TOC

SIZE A	DWG NO. RBT18601		
SCALE NTS	DATE 8-22-00	SHEET 1 of	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



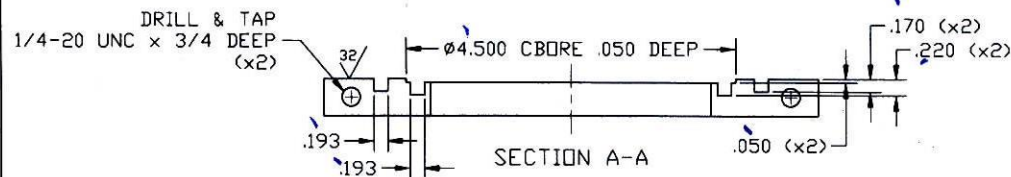
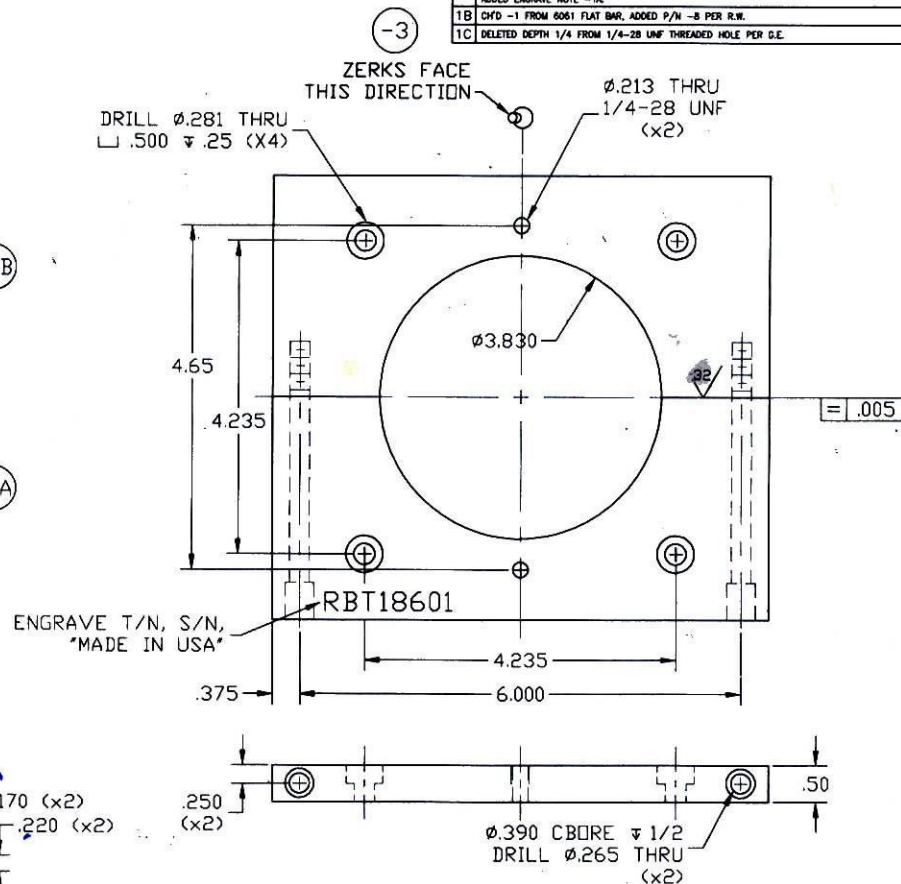
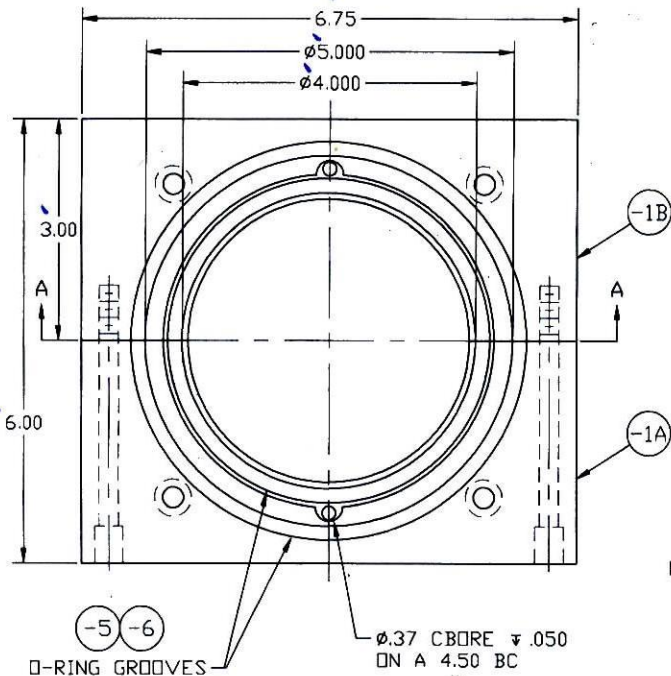
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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This drawing, specifications, and concepts contained herein are the sole property of Red Barn Machine, and may not be reproduced or used in any fashion without the prior written permission of Red Barn Machine.

REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	ADDED ZERK DIRECTION & CHANGE FROM 3-1/4 SHCS.	11/27/06		
1A	CHD TITLEBLOCK & REVISION BLOCK, CHD REVISIONS FROM ALPHABETICAL TO NUMERICAL, ADDED ENGRAVE NOTE -1A.	1/13/10	RJC	RW
1B	CHD -1 FROM 6061 FLAT BAR, ADDED P/N -8 PER R.W.	8/23/11	RJC	RW
1C	DELETED DEPTH 1/4 FROM 1/4-28 UNF THREADED HOLE PER D.E.	5/23/12	RJC	DE



NOTES:

1. IDENTIFY EACH PAIR.
2. ASSEMBLE & CUT PACKINGS AT SPLIT LINE.

ASSY QTY	QTY	B/O PART #	QTY	DESCRIPTION	MATERIAL	D/P INFORMATION OR SPECIFICATIONS
	1	-1	2	SWASH PLATE	6061 FLAT BAR	1/2 x 3 x 6-3/4
	1	-3	2	ZERK		1/4-28 UNF x 45°
	1	-5	1	O-RING	2-345N70 345	BUNAN
	1	-6	1	O-RING	2-353N70 353	BUNAN
	1	-8	2	SOCKET HEAD CAP SCREW		1/4-20 UNC x 3

RED BARN MACHINE	
TITLE SWASH PLATE REGREASING TOOL	
DWG NO. RBT18601	REV 1C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES IN DECIMALS HOLE $\pm .005$ SHAFT $\pm .01$ FRACTIONS $\pm 1/32$ ANGLES $\pm .5^\circ$	
UNLESS OTHERWISE SPECIFIED BREAK ALL SHARP EDGES 2 DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 3-16-01
DRAWN BY CHRIS PARR	
APPROVED ANDRZEJ RED	
USED ON MODEL MD-500	
SHEET 1 of 1	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
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